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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,545	03/15/2004	Phillip A. Swanson	SWANSON1	1328
23587	7590	04/24/2006	EXAMINER	
JOHN C SHEPARD			KIM, YOON YOUNG	
575 SUNSET ROAD			ART UNIT	
WINNETKA, IL 60093			PAPER NUMBER	

1723

DATE MAILED: 04/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/800,545

Applicant(s)

SWANSON, PHILLIP A.

Examiner

Yoon-Young Kim

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 07/12/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9, 11, 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dykes, U.S. Patent No. 3,522,882 in view of Perry 3,300,050.

Regarding Claim 1, Dykes discloses an inline filter assembly comprising: an elongate inlet connecting tube (#14); an elongate outlet connecting tube (#16); an intermediate filter body (#22); a first fitting (#18) having a relatively small diameter upstream distal end portion and a relatively large diameter downstream proximal end portion; a second fitting (#20) having a relatively small diameter upstream distal end portion and a relatively large diameter downstream proximal end portion; and filter media (#60) disposed within the filter body. However, Dykes does not disclose that the inlet and outlet tube are flexible. Perry teaches an inline filter assembly comprising flexible inlet and outlet tubes (Fig. 1, #11). It would have been obvious to one of ordinary skill in the art to modify Dykes with the element of Perry because such flexible material of manufacture is common in the filter art.

Regarding Claim 2, Dykes discloses that the internal diameter of the passageway of at least one of the fittings (#18, 20) is relatively larger near its proximal end than at its distal end.

Regarding Claims 3-4 and 14, Dykes discloses a second filter media (#34) disposed in one of the fittings within its passageway larger diameter portion for removing impurities from fluid flowing therethrough.

Regarding Claim 5, Dykes discloses that one of the filters (#34) physically removes solid impurities from fluid flowing therethrough.

Regarding Claim 6, Dykes discloses that one of the filters chemically purifies fluid flowing therethrough (Col. 3, Lines 5-12).

Regarding Claim 7, Dykes discloses that the first filter media (#60) is pervious to fluid flow and impervious to impurities larger than a first determined size to prevent larger impurities from moving from the inlet tube downstream to the outlet tube, and the second filter media (#34) is positioned downstream of the first filter media and is impervious to impurities larger than a second determined size smaller than the first predetermined size to prevent smaller impurities from moving from the inlet tube downstream to the outlet tube.

Regarding Claim 8, Dykes discloses that the first filter media is an array of filtering particles (Col. 3, Lines 5-12).

Regarding Claim 9, Dykes discloses a fluid pervious barrier filter (#32) positioned between the array of filtering particles and one of the fittings for maintaining the filtering particles within the filter body.

Regarding Claim 11, Dykes discloses that one of the filter media is a longitudinal series of at least two filter elements (#34, 60) for removing impurities from fluid flowing therethrough, each filter element having a differing porosity with a downstream filter element being impervious to smaller impurities than an upstream filter element.

Art Unit: 1723

Regarding Claim 13, Dykes discloses that the series of filters is a longitudinal series of screens (#32, 34), each screen having a different size mesh whereby each screen is impervious to different sized impurities.

Regarding Claim 15, Dykes discloses an inline filter assembly comprising: an elongate inlet connecting tube (#14); an elongate outlet connecting tube (#16); an intermediate filter body (#22); a first fitting (#18) having a relatively small diameter upstream distal end portion and a relatively large diameter downstream proximal end portion; a second fitting (#20) having a relatively small diameter upstream distal end portion and a relatively large diameter downstream proximal end portion; and filter media (#60) disposed within the filter body. However, Dykes does not disclose that the inlet and outlet tube are flexible. Perry teaches an inline filter assembly comprising flexible inlet and outlet tubes (Fig. 1, #11). It would have been obvious to one of ordinary skill in the art to modify Dykes with the element of Perry because such flexible material of manufacture is common in the filter art.

3. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dykes in view of Perry as applied to Claim 4 above, and further in view of Keller, U.S. Patent No. 3,263,813.

Regarding Claim 10, Dykes in view of Perry does not disclose a filter of sintered bronze. Keller ('813) teaches a filter comprising bronze (Col. 2, Lines 54-57). Determination of patentability in "product by process" claims is based on product itself. In re Thorpe, 227 USDQ 964 (1985). The production method Keller is deemed to be a structure alternative to the sintering process. It would have been obvious to one of ordinary skill in the art to modify Dykes in view of Perry with the element of Keller ('813) because it material of manufacture common in the filter art.

Art Unit: 1723

4. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dykes in view of Perry as applied to Claim 11 above, and further in view of Keller et al., U.S. Patent No. 2,773,601.

Regarding Claim 12, Dykes in view of Perry does not disclose a series of longitudinal layers. Keller ('601) teaches a filter comprising a longitudinal series (#22, 24, 25) of particulate layers each having a particulate of a different size. It would have been obvious to one of ordinary skill in the art to modify Dykes in view of Perry with the element of Keller ('601) in order to prevent a pressure drop and offer a large effective filtering area (Col. 6, Lines 18-38).

5. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dykes in view of Perry as applied to Claim 15 above, and further in view of O'Brien, U.S. Patent No. 2,984,359.

Regarding Claim 16, Dykes in view of Perry does not disclose an external rib. O'Brien teaches a filter comprising external ribs (#56, 64) on the fitting distal end portions. It would have been obvious to one of ordinary skill in the art to modify Dykes in view of Perry with the element of O'Brien in order to facilitate coupling connection (Col. 3, Lines 50-55).

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dykes in view of Perry and O'Brien as applied to Claim 16 above, and further in view of Keller ('813).

Regarding Claim 17, Dykes in view of Perry and O'Brien does not disclose clamps. Keller ('813) teaches a filter comprising clamps (#26). It would have been obvious to one of ordinary skill in the art to modify Dykes in view of Perry and O'Brien with the element of Keller ('813) because it is a method of securing common in the filter art.

Art Unit: 1723

7. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dykes in view of Perry as applied to Claim 15 above, and further in view of Edmonson, U.S. Patent No. 3,957,644.

Regarding Claim 18, Dykes in view of Perry does not disclose an external rib. Edmonson teaches a filter comprising external ribs (#40, 66) on the fitting proximal end portions. It would have been obvious to one of ordinary skill in the art to modify Dykes in view of Perry with the element of Edmonson because it is a method of attachment common in the filter art.

8. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dykes in view of Perry and Edmonson as applied to Claim 18 above, and further in view of Justice, U.S. Patent No. 5,078,862.

Regarding Claim 19, Edmonson discloses external ribs (#40, 66) on the fitting proximal end portions but does not disclose that the filter body is flexible. Justice teaches a filter with a flexible body (Col. 2, Lines 3-4). It would have been obvious to one of ordinary skill in the art to modify Dykes in view of Perry and Edmonson because such flexible material of manufacture is common in the filter art.

9. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dykes in view of Perry, Edmonson, and Justice as applied to Claim 19 above, and further in view of Keller ('813).

Regarding Claim 20, Dykes in view of Perry, Edmonson, and Justice does not disclose clamps. Keller ('813) teaches a filter comprising clamps (#26). It would have been obvious to one of ordinary skill in the art to modify Dykes in view of Perry, Edmonson, and Justice with the element of Keller ('813) because it is a method of securing common in the filter art.

Art Unit: 1723

10. Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dykes in view of Perry, O'Brien, Edmonson, Justice, and Keller ('813).

Regarding Claim 21, Dykes discloses an inline filter assembly comprising: an elongate inlet connecting tube (#14); an elongate outlet connecting tube (#16); an intermediate filter body (#22); a first fitting (#18) having a relatively small diameter upstream distal end portion and a relatively large diameter downstream proximal end portion; a second fitting (#20) having a relatively small diameter upstream distal end portion and a relatively large diameter downstream proximal end portion; and filter media (#60) disposed within the filter body. However, Dykes does not disclose that the inlet and outlet tube are flexible. Perry teaches an inline filter assembly comprising flexible inlet and outlet tubes (Fig. 1, #11). It would have been obvious to one of ordinary skill in the art to modify Dykes with the element of Perry because such flexible material of manufacture is common in the filter art.

Dykes in view of Perry does not disclose external ribs, a flexible filter body, or tube clamps. O'Brien teaches a filter comprising external ribs (#56, 64) on the fitting distal end portions. It would have been obvious to one of ordinary skill in the art to modify Dykes in view of Perry with the element of O'Brien in order to facilitate coupling connection (Col. 3, Lines 50-55). Edmonson teaches a filter comprising external ribs (#40, 66) on the fitting proximal end portions. It would have been obvious to one of ordinary skill in the art to modify Dykes in view of Perry with the element of Edmonson because it is a method of attachment common in the filter art. Justice teaches a filter with a flexible body (Col. 2, Lines 3-4). It would have been obvious to one of ordinary skill in the art to modify Dykes in view of Perry because such flexible material of manufacture is common in the filter art. It would have been obvious to one of ordinary skill in the art to modify Dykes in view of Perry with the element of Keller ('813) because it is a method of securing common in the filter art.

Art Unit: 1723

Regarding Claim 22, Dykes discloses a second filter media (#34) disposed in one of the fittings within its passageway larger diameter portion for removing impurities from fluid flowing therethrough.


Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yoon-Young Kim whose telephone number is (571) 272-2240. The examiner can normally be reached on 8:30-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YK
04/18/06


JOHN S. KIM
PRIMARY EXAMINER